

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857810007-4

1. Results for sample 10001-10002 were compared to
an exptl. value of 3.67 D.

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857810007-4"

TYUTYULKOV, N. (Sofiya)

Polarography of geometric oxime syn- and angi-isomers. Part. 1.
[with summary in English]. Zhur. fiz. khim. 32 no. 6:1389-1392
Je '58. (MIRA 11:8)

1. Vysshyy meditsinskiy institut, Sofiya, Bolgariya.
(Benzaldehyde)
(Polarography)

TYUTYULKOV, N. [Tiutiulkov, N.]; TSVETANOV, K.; STAMATOVA, V.

Polarographic behaviour of polymorphic modifications of
 α -unisaldoxym. Doklady BAN 16 no. 4: 389-392 '63.

1. Submitted by Corresponding Member B. Kourtev [Kurtev, B.]

TYUTYULKOV

Influence of the solvent on the kinetics of the electrode process with antecedent reaction. N. Tyutyulkov and E. Paspaleev. Bulgar. Akad. Nauk. Izvest. Khim. Inst. 6, 388-99 (1958).

The theoretical and exptl. influence of the solvent on the kinetics of an electrode process with antecedent reaction is exmd. During such a process the limiting currents depend directly on the velocity consts. of the homogeneous reaction which takes place before the electrode process. But, as the velocity consts. depend, in turn, essentially on the medium, a change of the medium does, consequently, influence the limiting currents. The most frequent cases, in which the antecedent reaction is monomol. and takes place between the substances A and B, is reviewed. The latter are in equil. and electroactive at different potentials. A change of the solvent does not only alter the value but also the character of the wave of the limiting currents which are caused by the substances A and B. The influence of the solvents H₂O, MeOH, EtOH, and PrOH on the proportion of the limit currents of the tautomeric forms [C:N=O ⇌ :C:C(H)→ O] of oximes is exmd. exptl. The dependence of the limiting currents on the solvent made it possible to qual. identify and to quant. det.

4

the geometric syn- and anti-forms of the oximes in a soln.
S. Pajakoff

KHANIN, I.M., doktor tekhn. nauk; TYUTYUNIK, L.N.

Republican Scientific and Technical Conference on the modeling
of coke ovens and chemical apparatuses. Met. i gornorud. prom.
no.1:75-76 Ja-F '64. (MIRA 17:10)

TYUTRYUMOVA, Z. I., Candidate Med Sci (diss) -- "The problem of the mechanisms of experimental epilepsy". Leningrad, 1959. 19 pp (State Order of Lenin Inst for the Advanced Training of Physicians im S. M. Kirov), 200 copies (KL, No 24, 1959, 153)

TYUTRYUMOVA, Z.I.

Role of the sinus caroticus in the genesis of epileptics fits.
Vop. psikh i nevr. no.3:191-196 '58. (MIRA 12:3)

1. Iz otdeleniya nervnykh bolezney klinicheskoy bolnitsy im.
chudnovs.
(CAROTID SINUS) (EPILEPSY)

DRAPCHINSKIY, L.V.; KOVALENKO, S.S.; PETRZHAK, K.A.; TYUTYUGIN, I.I.

Probability ratios of triple fission of U²³⁵ and U²³⁸ by
neutrons of various energies. Atom. energ. 16 no.2:144-145
F '64. (MIRA 17:3)

1
:
:

5(4)

AUTHOR:

Tyutyulkov, N. N.

SOV/76-33-7-32/40

TITLE:

The Effect of Intramolecular Interaction on Molecular Refraction

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 7,
pp 1660 - 1661 (USSR)

ABSTRACT: The effect of the interaction of conjugate bonds on refraction is investigated on an oscillation model of the chemical bond. It is assumed that the interaction of the bonds may approximately be regarded as an interaction of harmonic oscillators. A similar model was considered from other standpoints in the article (Ref 1) and the monograph (Ref 2). According to an equation (6) deduced for the exaltation ΔR , this value is calculated for several organic molecules. The values 1.49 and 0.07 were obtained from a calculation of ΔR of the trans- and cis-configuration according to data given in references 4 and 5 for butadiene. A trans-configuration may thus be assumed for butadiene in accordance with data published in the article (Ref 6). The value $\Delta R = 0.07$ for the cis-configuration agrees with the experimental value $\Delta R = -0.03$ for 1,3-cyclohexadiene. The author gives several other values of the exaltation of various compounds,

Card 1/2

The Effect of Intramolecular Interaction on
Molecular Refraction

SOV/76-33-7-34/4c

which are in good agreement with experimental data. There are
1 figure and 14 references, 4 of which are Soviet.

ASSOCIATION: Vysshiy meditsinskiy institut, Kafedra meditsinskoy, khimii Sofiya
(Higher Medical Institute, Chair of Medical Chemistry, Sofia)

SUBMITTED: September 3, 1958

Card 2/2

Tyutyun, N. A. -- "Reconstruction of Blocks of Multistory Buildings in the Large Cities of the Ukrainian SSR. (According to Materials of the Planning and Construction of the Cities of Kiev and Khar'kov)." Acad of Architecture of the Ukrainian SSR, Inst of City Construction, Kiev, 1955 (Dissertation for Degree of Candidate in Architectural Sciences.)

SO: Knizhnaya Letopis', No. 23, Moscow, Jun 55, pp 87-104

USSR/Cultivated Plants - Fruits. Berries.

M.

Abs J^Our : Ref Zhur - Biol., No 4, 1958, 15760

Author : I.F. Krasnoshchek, ~~V.I.~~ Tyutyun

Inst :

Title : Cultivating Apples in the Nursery.
(Vyrashchivaniye yabloni v pitomnike).

Orig Pub : Sadovodstvo, vinogradarstvo i vinodeliye Moldavii, 1957,
No 3, 55-57.

Abstract : No abstract.

Card 1/1

TYUTYUNDZHI, I.Ya.

Difficulties and possible complications of an intralaryngeal
biopsy in cancer of the larynx. Zhur. ush., nos. i gorl. bol.
23.no.3:33-36 My-Je '63. (MIRA 16:7)

1. Iz otorinolaringologicheskogo otdeleniya (zav.-doktor med.
nauk M.G.Bradulina) Gosudarstvennogo nauchno-issledovatel'skogo
instituta onkologii imeni Gertsena.

(LARYNX—CANCER) (LARYNX—BIOPSY)

TYUTYUNDZHI, I.Ya.

Fistulous symptom from the mastoid process. Zhur. ush., nos. i
gorl. bol. 20 no. 3:58-60 My-Je '60. (MIRA 14:4)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - deystvitel'nyy
chlen AMN SSSR zasl. deyatel' nauki prof. B.S. Preobrazhenskiy)
lechebnogo fakul'teta II Moskovskogo meditsinskogo instituta
imeni N.I. Pirogova.

(MASTOID PROCESS—DISEASES)

BULGARIA

Dr Ivan BALKANSKI and Dr Nikola TYUTYUNDZHIEV [Affiliation not given]

"Proving the Precence of Re-Processed Meat Products in Sausages."

Sofia, Veterinarna Sbirka, Vol 59, No 11, 1962; p 23.

Abstract: Description of the materials and histologic staining method for incortrovertibly proving adulteration of sausage meat by inclusion of old sausage (differential staining of skin particles.) Common stains are used. Photomicrograph.

1/1

TYUTYUNIK, A.-D.

137-58-5-10592

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 246 (USSR)

AUTHORS: Gruzin, P. L., Kurdyumov, G. V., Tyutyunik, A. D., Entin, R. I.

TITLE: On the Role of Diffusive Displacements of Atoms in High-temperature Strength (O roli diffuzionnykh peremeshcheniy atomov v zharoprochnosti)

PERIODICAL: V sb.: Issled. po zharoprochn. splavam. Vol 2. Moscow, AN SSSR, 1957, pp 3-8

ABSTRACT: Some results of investigations of diffusion (D) in metals and alloys relative to the problem of high-temperative strength (H) are examined. It is noted that the special features of the behavior of metals at high temperatures under load are conditioned by the existence of rather frequent diffusive shifts of atoms (A) in the crystal lattice of the phases constituting the alloy. Therefore, along with the shear mechanism of plastic deformation, a diffusion mechanism becomes active. The number of atomic displacements, increasing with temperature, tends to limit the temperature zone in which hardened alloy phases may be employed, owing to the reduction in the resistance to plastic deformation due to the shear mechanism. The relatively higher A

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137-58-5-10592

On the Role of Diffusive (cont.)

mobility at the grain boundary or the intra-grain interface, as against that within the body, means that the grain boundaries constitute the weak spot in the resistance of a metal to deformation and failure at high temperatures. A reduction in the mobility of the A is required to increase the level of H. It is demonstrated that an identical level of mobility of the A can be attained at different temperatures with different metals. The temperature at which a given level of diffusive mobility of A is attained is determined primarily by the energy of activation. In some metals the level of mobility of the A is also significantly shifted by the change in the magnitude of the factor D_0 preceding the exponent in the expression for the relationship between the coefficient of diffusion (CD) and the temperature. Accumulated experimental data show that a variation in the CD may occur owing to changes in either parameter of the temperature dependence of the CD. At elevated energies of activation (due to alloying), there is usually an increase in the multiplier D_0 , with the result that at temperatures that are high for the given alloy base metal there is little change in the CD, while at low temperatures they may change by a full order of magnitude or even more. Addition to the alloy of elements that strengthen the bond in the solid solution causes a shift toward higher temperatures for the onset of the diffusive ductility mechanism.

1. Metals--Diffusion 2. Alloys--Diffusion 3. Metals--Temperature factors
Card 2/2 4. Metals--Mechanical properties

T Y U T Y U N I K , A . G .

AUTHOR: Tyutyunik, A.G. 32-9-28/43

TITLE: Laboratory Vacuum Furnace for Temperatures of 2000 - 2500°
(Laboratornaya vakuumnaya pech' dlya temperatur 2000 - 2500°)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 9, pp.1126-1127 (USSR)

ABSTRACT: A vacuum furnace with a tungsten heater, which was developed by the author for a working temperature of 2000 - 2500° is described. The essential advantages offered by this furnace are the lack of ceramics in the high temperature zone, and an efficacious screening system which makes it possible to attain high temperatures with a relatively low power consumption in a large volume. The furnace was tested for a whole year in the laboratory and deserves to be recommended for investigations carried out in laboratories at high temperatures. There follows a detailed description of the furnace. The furnace may be used in any chamber in which the vacuum is not less than $1 \cdot 10^{-4}$ mm torr. Basic investigations of metal were carried out in a vacuum of the order of $1 \cdot 10^{-5} - 1 \cdot 10^{-7}$ mm torr. The vacuum system consists of a vacuum

Card 1/2

Laboratory Vacuum Furnace for Temperatures of 2000 - 2500°

32-9-28/43

pump, a diffusion oil pump with 1000 l/sec, and a vacuum metal chamber with 200 l contents and water cooling. There is 1 figure.

ASSOCIATION: Physical-Technical Institute AN Ukrainian SSR (Fiziko-tehnicheskiy institut Akademii nauk USSR)

AVAILABLE: Library of Congress

Card 2/2

TYUTYUNIK, A.F.

Development of wintering buds of the grapevine in the central
U.S.S.R. Trudy TSGL 5 :326-331 '53. (MIR 12:11)
(Buds) (Grapes)

TYUTYUNIK, A.F.

Characteristics of differentiation of fruit buds in grapevines.
Izv,AN SSSR,Ser.biol. no.6:921-924 N-D '62. (MIRA 16:1)

1. Research Institute of Horticulture, Viniculture and
Viticulture, Kishinev.

(GRAPE) (BUDS)

TSEYTLIN, Yafim Solomonovich; KOLODZIY, Iosif Ivanovich; LAPIR, F.A.,
nauchnyy red.; TYUTYUNIK, M.S., red.; DORODNOVA, L.A., tekhn.
red.

[The concrete placer and molding equipment operator] Mashinist
betonoukladchika i formovochnogo oborudovaniia. Moskva, Prof-
tekhnizdat, 1962. 277 p. (MIRA 16:3)
(Concrete plants--Equipment and supplies)

KHURIN, Yefim Semenovich; GENIN, M.Ya., nauchnyy red.; TYUTYUNIK,
M.S., red.; PERSON, M.N., tekhn. red.

[Manual for young sanitary engineers] Spravochnik molodogo
santekhnika. Moskva, Vses. uchebno-pedagog. izd-vo Prof-
tekhizdat, 1961, 382 p. (MIRA 15:3)
(Sanitary engineering)

AKOL'ZIN, L.Ye.; BEDILO, V.Ye.; BOROZDOV, I.A.; VINARSKIY, I.S.;
GOLOVATYUK, S.A.; NIKOLAYEV, G.P. Prinimali uchastiye:
DATSUN, M.V.; ZHEGOV, V.T.; IVANITSKAYA, S.Yu.; KOMISSAROV,
M.A.; KALINCHUK, I.G.; LISHBERGOV, V.D.; SEREBRENNIKOVA, S.O.;
FILIN, V.D. DUGIN, Ye.V., otv.red.; DUKALOV, M.F., red.;
BUBYR¹, V.A., red.; TYUTYUNIK, Ya.I., red.; VARSHAVSKIY, I.N.,
red.; MONIN, M.I., red.; PANCHENKO, A.I., red.; BELYAYEV, F.R.,
red.; RABINKOVA, L.K., red.izd-vs; BOLDYREVA, Z.L., tekhn.red.

[Types of mine cross section] Tipovye secheniya gornykh vyrabotok. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu.
Vol.5. [Cross section of mines with reinforced-concrete supports
and hinge-hung crossbars for 1-, 2- and 3-ton railroad cars]
Secheniya vyrabotok, zakreplennykh zhelezobetonnymi stoikami
s sharnirno-podvesnym vekhniakom, dlis 1-, 2- i 3-tonnykh
vagonetok. 1960. 411 p. (MIRA 13:12)

1. Khar'kov. Gosudarstvennyy proyektnyy institut Yuzhgiproshakht.
(Mine timbering)

IRIKHIMOVICH, A.I.; ZELENIN, A.M.; TYUTYUNIK, S.N.

Further investigations of the biological foundations of the culture
of yearling carp. Trudy Inst. biol. Mold. fil. AN SSSR 2 no.2:15-24
'66. (MIRA 15:7)
(Moldavia—Carp)

USSR/Soil Science. Soil Genesis and Geography

J-2

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 91386

Author : Tyuryukanova E.B.

Inst : Moscow Univ.

Title : Marsh Soils of Meshchanskaya Lowlands

Orig Pub : Vestn. Mosk. un-ta, Ser. biol., pochvoved., geol., geogr.,
1957, No 4, 115-123

Abstract : No abstract

Card : 1/1

17417447A/H, A.D
AUTHORS: Tyutyunnik, A.D. and Estulin, G. V. 126-3-31/34

TITLE: Influence of the micro-structure on the diffusion of Cr
in nickel base alloys. (Vliyanie mikrostruktury na
diffuziyu khroma v splavakh na nikelevoy osnove).

PERIODICAL: "Fizika Metallov i Metallovedeniye" (Physics of Metals
and Metallurgy), 1957, Vol.4, No.3, pp. 558-561 (U.S.S.R.)

ABSTRACT: The aim of the here described work was to investigate
the diffusion of chromium in nickel-chromium-titanium-
aluminium base alloys (type XH8OT) in the single-phase and
two-phase ranges. The material for the test was taken from
a series of nickel base melts containing 20.4% Cr, 2.5% Ti,
1% Al, 0.04% C and between 1.5 and 6.1% Ta. It was
established that the micro-structure plays an important part
in diffusion processes: heterogenization of the structure
brings about an appreciable increase of the speed of
diffusion and can change the mechanism of this process. It
can also be concluded that introduction of Ta into alloys
of this type has an unfavourable influence on the inter-
atomic bonds and causes an appreciable increase of the atomic
mobility of chromium. This influence of Ta on the diffusion
constant of Cr is in agreement with the effect of this
element on the scale resistance of the investigated alloys;

Card 1/2

126-3-31/34
Influence of the micro-structure on the diffusion of Cr
in nickel base alloys. (Cont.)

with increasing Ta content (above 2.6%) a gradual decrease
of the long duration strength, plasticity and toughness can
be observed in the temperature range 700 to 800 C.
There are 2 figures, one table and 5 Slavic references.

SUBMITTED: September 7, 1956.

ASSOCIATION: Institute of Metallurgy and Metal Physics.

(Institut Metallovedeniya i Fiziki Metallov).

Institute of Steel TsNIIChM. (Institut Stali TsNIIChM).

AVAILABLE: Library of Congress

Card 2/2

I . . . V I T A , A . D .

USSR / Diffusion. Sintering.

z-6

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9328
Author : Gruzin, D.L., Tyutyunnik, A.D.
Inst : Institute of Metal Research and Metal Physics, Central
Title : Scientific Research institute for Ferrous Metallurgy.
Concerning the Diffusion Mobility of Atoms During the Mel-
ting and Crystallization of Metals.
Orig Pub : Fiz. metallov i metallovedeniye, 1956, 3, No 1, 70-75
Orig. Ed. :
Abstract : Certain problems concerning the role of diffusion in melting and recrystallization of metal are considered. An analysis of the available data on self-diffusion leads to the conclusion that the melting processes and the recrystallization of various metals are characterized by definite levels of diffusion mobility. The threshold levels of the diffusion mobility are determined by a coefficient of the order $10^{-22} \text{ cm}^2 \text{ sec}^{-1}$ in recrystallization and 10^{-8} cm^2
Card : 1/2

USSR / Diffusion. Sintering.

E..6

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9328

Abstract : sec^{-1} in the melting of pure metals. The crystallization of solid solutions takes place at higher threshold levels of diffusion mobility ($D \sim 10^{-13} \text{ cm}^2 \text{ sec}^{-1}$). It can be assumed that other single-type processes that take place in solid bodies and that are connected with diffusion also have approximately equal threshold levels of diffusion mobility.

Card : 2/2

MOROZOV, Ye.F.; TYUTYUKOVA, M.N.

Lignin drying in the turbulent flow of flue gases. Gidroliz. i lesokhim.
prom. 16 no.8:22-25 '63.
(MIRA 17:1)

1. Sibgiprogidroliz (for Morozov). 2. Khakasskiy gidroliznyy zavod (for
Tyutyukova).

TYUTYUNDZHI, A.G.

Dynamometric method of measuring the elements of motion. Trudy
Sam. Gos. un. no.144:147-150 '64. (MIRA 18;9)

L 01752-67 EWP(j) RM
ACC NR: AP6035625

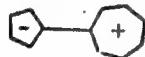
SOURCE CODE: BU/0011/65/018/011/1007/1010

TYUTYULKOV, N., PASPALEEV, E., Institute of Organic Chemistry, Bulgarian
Academy of Sciences [Original-language version not given]

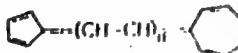
*4/6
B*
Electronic Structure of the α -Cyclopentadienyl- ω -Cycloheptatrienyl-Polyenes"

Sofia, Doklady Bolgarskoy Akademii Nauk, Vol 18, No 11, 1965, pp 1007-1010

Abstract: [English article] A study of sesquifulvalene (I) by means of the LCAO-MO theory of molecular orbits (J. F. Tinker, J. Chem. Phys., 19, 1951, 981) showed earlier that the distribution of electronic density corresponds to the structure



The present paper describes investigations of the electron density distributions in nuclei divided by polyene chains of the form



Calculations were carried out on the (Minsk-2) computer in the Hueckel's approximations (E. Hueckel, Z. Phys., 70, 1931, 204) for $n = 0, 1, 2, \dots, 16$. In all cases the sum of the charges in the five-member ring is smaller than -0.75, while the sum of the charges in the seven-member ring is greater than 0.74. This paper was presented by corresponding Member DAN A. Spassov on 19 July 1965.

Card 1/2

0722 0025

ACC NR: AP6035625

Orig. art. has: 4 figures and 1 table. (JPG: 36,002)

TOPIC TAGS: electron density, electron distribution, electron structure

SUB CODE: 20, 07 / SUBM DATE: 19 Jul 65 / OTH REF: 003

Card 2/2 pb

AUTHOR: Stromberg, A. L.; Wagner, C. R.; Hopkins, A. A.; Tamm, A. J.

TITLE: Rapid determination of microconcentrations of copper in Indium without separation of the bulk of the Indium

SUBJECT: Copper analysis; Indium analysis; Polarographic analysis; Microanalysis; Reactions; Reactivity; Concentration; Separation; Separation methods; Analytical methods

SEARCHED

TOPIC TAGS: copper determination, indium analysis, dropping mercury electrode, polarography

ABSTRACT: Investigations were carried out in order to select a supporting electrolyte

which would permit the use of a dropping mercury electrode for the rapid determination of copper in indium.

The following supporting electrolytes were examined: citric acid, oxalic acid, tartaric acid, and

EDTA.

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CIA-RDP86-00513R001857810007-4

2025 RELEASE UNDER E.O. 14176

ACCESSIONED AND INDEXED

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857810007-4"

L14972-65
ACCESSION NR: AT4048098

S/0000/64/000/000/0115/0118

AUTHOR: Kaplin, A.A., Zakharov, M.S., Stromberg, A.G., Tyutyunkova, R.S.

SOURCE: Spektral'nye i khimicheskiye metody analiza materialov (Spectral and chemical methods of analysis of materials) / L. V. Kaplin, M. S. Zakharov, A. G. Stromberg, R. S. Tyutyunkova. - Leningrad: Khimiya, 1972. - 272 s. - 27

TOPIC TAGS: polarography, dropping mercury electrode, copper determination, indium analysis

ABSTRACT: An amalgam polarographic method was developed for the determination of

L 1450-65
ACCESSION NR: AT4048098

and part of the plan of the project of the plant for the production of the aircraft engine, if the input stripes of 1-2 are to be reduced to 1-20 mm.

and part of the plan of the project of the plant for the production of the aircraft engine, if the input stripes of 1-2 are to be reduced to 1-20 mm.
Engineer R. D. Tresnitskaya. Orig. art. has. 2 figures

Central Scientific Technical Institute

SUBMITTED: 1966-4

NO REF SOV: 001

OTHER: 001

Card 2/2

TYUTYUNIK, A.F.

Viticulture

Developing hibernation buds of grapes in the central zone of the U.S.S.R. Vin SSJ. 12,
no. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, ADJUST 1952 ~~1953~~ Unc1.

L 01256-67 EWT(m)/EWP(k)/EWP(e)/T/EWP(t)/ETI IJP(c) WH/JD
ACC NR: AP6032956 SOURCE CODE: UR/0363/66/002/010/1892/1894

AUTHOR: Somov, A. I.; Svinarenko, A. P.; Tyutyunnik, A. G. 6²3

ORG: Physico-Technical Institute, Academy of Sciences UkrSSR (Fiziko-tehnicheskiy institut Akademii nauk UkrSSR)

TITLE: Preparation of corundum single crystals by electron-beam zone melting

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 10, 1966, 1892-1894

TOPIC TAGS: single crystal growth, corundum, alumina, zone melting, electron beam melting, electron gun

ABSTRACT: Corundum single crystals have been grown by electron-beam float-zone melting of sintered alumina rods, with or without seed, using an improved electron

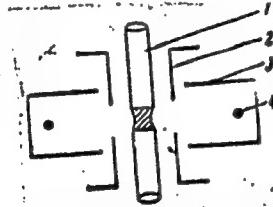


Fig. 1. Electron gun heater

1 - Sample in the process of zone melting; 2 - collector; 3 - focusing electrodes; 4 - emission cathode.

Card 1/2

UDC: 553.65:548.55:542.9

L 01256-67

ACC NR: AP6032956

gun. The electron gun schematically presented in Fig. 1 was developed for zone melting dielectric materials with coefficients of secondary emission greater than one. The tungsten collector (2) for secondary electrons simultaneously accelerates the primary electrons, and therefore has the same functions as the accelerating grid in previous electron guns which had very serious defects. Transparent corundum single crystals of regular shapes, 60 mm long and 4.4 mm in diameter, were grown by the method described on corundum seed crystal in vacuum and had a molten-zone travel rate of 80 mm/hr. Growing single crystals without seed was also possible. Orig. art. has: 3 figures.

[JK]

SUB CODE: 20/ SUBM DATE: 16Dec65/ ORIG REF: 002/ OTH REF: 004/ ATD PRESS:
5097

hs

Card 2/2

MYASKOVSKIY, Izrail' Grigor'yevich; LEVI, S.S., kand.tekhn.nauk, retsenzent;
PARFENT'YEV, N.F., inzh.-prepodavatel'; DEMKOV, Ye.D., inzh.,
nauchnyy red.; TYUTYUNIK, M.S., red.; GILENSON, P.G., tekhn.red.

[Electric equipment of building materials plants] Elektrooborudovanie zavodov stroitel'nykh materialov. Moskva, Gos.izd-vo
lit-ry po stroit., arkhit. i stroit.materialam, 1959. 232 p.
(MIRA 12:4)

1. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR (for Levi). 2. Dneprodzerzhinskiy industrial'nyy tekhnikum (for Parfent'yev).
(Building materials industry--Electric equipment)

TYUTYUNIK, M. S.

PSHENITSYN, V.; KRUGLYAK, S.A., nauchnyy redaktor; TYUTYUNIK, M.S., redaktor;
PYATAKOVA, N.D., tekhnicheskiy redaktor

[Statements of Sebryakovo workers on reducing the time required to
build and equip cement factories] Slovo sebriakovtsev o szhatykh
srokakh stroitel'stva i osvoeniiia tsementnykh zavodov. Moskva,
Gos.izd-vo lit-ry po stroit.materiamam, 1957. 121 p. (MIRA 10:8)
(Cement plants)

77/17/1986 R. M. A.

BUTT, Yury Mikhaylovich; TYUTYUNIK, M.S., redaktor; GLADKIKH, N.N.
tekhnicheskiy redaktor

[Technology of cement and other binding materials] Tekhnologiya
tsementa i drugikh viazushchikh materialov. Izd. 3-e, perer.
Moskva, Gos. izd-vo lit-ry po stroit. materialam, 1956. 347 p.
(Cement) (MIRA 10:4)

TYUTYUNIK, M.S., redaktor; KRUGLYAK, S.L., nauchnyy redaktor;
~~LYUBMOVSKAYA, N.I.~~, tekhnicheskiy redaktor.

[More cement for the Soviet homeland; work experience of the
Georgian Stalin Cement Plant] Bol'she tsamenta Sovetskoi
rodine. Iz opyta raboty Gruzinskogo tsementnogo zavoda imeni
I.V. Stalina. Moskva, Gos. izd-vo lit-ry po stroitel'nym
materialam, 1954. 91 p.
(Cement)
(MLRA 7:12)

ANSELM, M.; KHODOROV, Ye.I., kandidat tekhnicheskikh nauk, redaktor;
KOSAREVA, V.M., nauchnyy redaktor; TYUTYUNIK, M.S., redaktor;
LYUDKOVSKAYA, N.I., tekhnicheskiy redaktor

[Shaft kilns] Shakhtnaia pech'. [Perevod.] Pod red. E.I.Khedorova.
Moskva, Gos. izd-vo lit-ry po stroit. materialam. Pts.1 and 2.
1956. 137 p. (MIRA 10;3)
(Cement kilns)

TYUTYUNIK M.S.

FEL'ZENBAUM, V.G.; RABINOV, I.L., nauchnyy redaktor; TYUTYUNIK, M.S.,
redaktor; DVORNIKOVA, N.I., tekhnicheskiy redaktor.

[Use of hot water in the manufacture of asbestos cement products]
Primenenie teplovoi vody v proizvodstve asbestotsamentnykh izdelii.
Moskva, Gos. izd-vo lit-ry po stroitel'nym materialam, 1953. 41 p.
(Asbestos cement)

TYUTYUNIKOVA, N. A.

MASHNY, Mitrofan Sergey -len; SREDNAYAAG, U.I., otvetschivayushchiy;
TYUTYUNIKOVA, N.A., redaktor izk. d'lyash; KROVERZAKA, Z.E.,
tekhnicheskiy redaktor

[Gas meter operator in coal mines] Gazometrshchik na ugol'noi
shakhte. Izd. 2-e. Myshev. Uralstekhnizdat, 1957. 63 p.
(Gas meters) (Mine names) (Date 10/19)

TYUTYUNKOV, P.N., inzhener.

Using rich lime paste for waterproof plastering mortars. Stroi.
prom. 34 no.10:49 0 '56. (MLRA 9:12)
(Mortar) (Plaster)

TYUTYUNNIK, I.P.

Neurological syndromes accompanying fractures of the distal part of
the forearm. Ortop.travm. i protez. 17 no.6:108 N-D '56. (MLRA 10:2)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta ortopedii i
travmatologii (direktor - zasluzhennyy deyatel' nauki professor
N.P.Novachenko)
(ARM--FRAC TURE)

TYUTYUNNIK, L. A.

33138

Raspredeleniye Napryazheniy U Gornykh Vyrabotok Slozhny Formy. Doklady Akad. Nauk Ukr. Ssr, 1949, No 4 c. 39-44 - Na Ukr. Yaz. - Rezyume Na Russ. Yaz

SO: Letopis' Zhurnal'nykh Statey, Vol. 45, Moskva, 1949

BEREZA, V.Sh.; LEONTENKOV, A.I., inzh., nauchnyy red.; TYUTYUNIK, M.S.,
red.izd-va; EL'KINA, E.M., tekhn.red.

[Automatic control of milling processes in ball mills] Avto-
maticeskoe regulirovanie protsessov pomola v sharovoi mel'nitse.
Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materiam.,
(MIRA 12:8)

1959. 73 p.

(Automatic control) (Milling machinery)

FEL'ZENBAUM, V.G.; RABINOV, I.L., nauchnyy redaktor; TYUTYUNIK, M.S.,
redaktor; DVORNIKOVA, N.I., tekhnicheskiy redaktor.

[Use of hot water in the manufacture of asbestos cement products]
Primenenie teplovoi vody v proizvodstve asbestotsementnykh izdelii.
Moskva, Gos. izd-vo lit-ry po stroitel'nym materialam, 1953. 41 p.
(Asbestos cement)

BUTT, Yu.M.; BERKOVICH, T.M.; TYUTYUNIK, M.S., redaktor; PANOVA, L.Ya,
tekhnicheskiy redaktor.

[Binding agents with added surface active substances] Viazushchie
veshchestva s poverkhnostno-aktivnymi dobavkami. Pod red. P.A. Be-
bindera. Moskva, Gos. izd-vo lit-ry po stroit. materialam, 1953.
(MLRA 7:7)

247 p.
(Concrete) (Surface active agents)

15-57-10-14704

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,
p 223 (USSR)

AUTHORS: Tyutyukin, V. S., Grigorenko, P. G.

TITLE: The Chauvay Slide (O Chauvayskom opolzne)

PERIODICAL: Tr. In-ta geol. AN KirgSSR, 1956, Nr 8, pp 131-134

ABSTRACT: The authors describes in detail a slide on the left bank slope of the Chauvay River valley (Molotovabad rayon of the Oshskaya Oblast, Kirghiz SSR), which became a danger to the structures in a mining village. The body of the slide is composed of deluvial sandy clays (slope wash and creep deposits) of great thickness. The underlying rocks are Silurian shales. An indirect feature of the slide is that it proceeds slowly but, considering the loosening of the slide mass (as a consequence of which the mass absorbs large quantities of water), the great bulk of the slide, and the high seismicity of the Chauvay region, it is necessary to assume that during earthquakes and periods of excessive moisture there

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15-57-10-14704

The Chauvay Slide (Cont.)

is a possibility of the slide piling up on the terrace of the Chauvay River, endangering the buildings on it. Measures for improving the stability of the slope are complex. The described slide is one of many frequent similar occurrences that are widespread on the left side of the Chauvay River; they have not been previously studied. Slides are rather common throughout all of southern Kirghizia. The organization of a station for studying slides is one of the important tasks of the engineering geology service of Kirghizia.

N. S. Gustomesova

Card 2/2

TYUTIN, F.G.

Formation, state and position of blow and gas galleries near
the fire-face and voids in the burnt-out area. Podzem. gaz. ugl.
no.4:30-36 '58. (MIRA 11:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Podzemgaz.
(Coal gasification, Underground)

VIKHTER, Yakov Isaakovich; MAK, Isaak L'vovich; SHVAGIREV, Mikhail Petrovich; PECHURO, S.S., nauchnyy redaktor; TIUTYUNIK, M.S., redaktor; PANNOVA, L.Ya., tekhnicheskiy redaktor.

[Production of gypsum and gypsum construction elements] Proizvodstvo gipsa i gipsovykh stroitel'nykh detalei. Moskva, Gos. izd-vo lit-ry po stroit. materialam, 1954. 140 p.
(Gypsum) (Building materials)

(MLRA 8:2)

TYUTYUNNIK, A.S.

Installation of rectifiers with solenoid drives for automatic
control of the circulation of centrally heated water. From.
energ. 18 n6.2:8 F '63. (MIRA 16:2)
(Automatic control) (Feed water)

GOL'DBERG, I.A.; TYUTYUNNIK, F.P.

Preventing the freezing of the clay to the body of transportation
vehicles. Ogneupory 29 no.4:165-167 '64. (MIRA 17:4)

1. Vsesoyuznyy institut ogneuporov.

TYUTYUNNIK, F. R.; YEVTYUKHOV, G. A.

Using the tracklaying machine in replacing rails with used ones. Put' i put. khoz. 7 no. 3:7-9 '63. (MIRA 16:4)

1. Machal'nik slushby puti na Pridneprovskoy doroge, Dnepropetrovsk (for Tyutyunnik). 2. Machal'nik putevoy machinnoy stantsii No. 6, Illarionovo, Pridneprovskoy dorogi (for Yevtyukhov).

(Railroads—Rails)
(Railroads—Tracklaying machinery)

TYUTYUNNIK, M., nauchnyy otrudnik

Flying cost and crop value. Grazhd. av. 19 no.4:5 Ap '62.
(MIRA 15:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut
Grazhdanskogo vozdushnogo flota.
(Aeronautics, Commercial--Finance)
(Aeronautics in agriculture)

CHERPOVSKIY, Serafim Sergeyevich; ALESHINA, Ol'ga Kuz'minichna;
ROYAK, S.M., prof., nauchn. red.; TYUTYUNIK, M.S., red.

[Production of white and colored Portland cement] Proizvod-
stvo belogo i tsvetnogo portlandsementa. Moskva, Stroiz-
dat, 1964. 125 p. (MIRA 17:9)

MANUYLOV, L.A.; ELYUKOVSKIY, G.I.; GEZBURG, A.A.; BALKEVICH, V.L., kandidat
tekhnicheskikh nauk, redaktor; TYUTYUNIK, M.S., redaktor; LYUDKOVSKAYA,
N.I., tekhnicheskiy redaktor.

[Practical laboratory work in the technology of silicates] Laborator-
nyi praktikum po tekhnologii silikatov. Pod.red.V.L.Balkevicha. Moskva,
Gos.izd-vo lit-ry po stroit. materialam, 1955. 346 p. (MLRA 9:5)
(Silicates)

1) SOKOLOV, Pavel Nikolayevich; BUTT, Yu.M., professor, doktor tekhnicheskikh nauk, redaktor; TYUTYUNIK, M.S., redaktor; LYUDKOVSKAYA, N.I., tekhnicheskiy redaktor

[Technology of asbestos-cement articles] Tekhnologiya asbesto-tsamentnykh izdelii. Izd. 2-e, dop. i ispr. Moskva, Gos. izd-vo lit-ry po stroit. materialam, 1955. 259 p. (MIRA 9:3)
(Asbestos cement)

VOL'PERT, G.D.; TYUTYUNIK, E.S., redaktor; PYATAKOVA, N.D., tekhnicheskiy
redaktor

[Plating by means of pulverized metals; metalization] Pokrytiia
raspylennym metallom [Metallizatsiya]. Moskva, Gos.izd-vo lit-ry
po stroit. materialam, 1957. 265 p.
(MIRA 10:10)
(Metal spraying)

BOGANOV, Aleksandr Ivanovich; BANIT, F.G., redaktor; TYUTYUNIK, M.S., redaktor;
LYUDKOVSKAYA, tekhnicheskiy redaktor.

[Mechanical equipment of cement factories] Mekhanicheskoe oborudovanie
tsementnykh zavodov. Izd.2-e, perer. i dop. Moskva, Gos.izd-vo lit-ry
po stroit.materialam, 1955. 291 p. (MLRA 8:12)
(Cement industries)

TYUTYUNIK, Ye., inzhener-polkovnik; PAVLOV, S., inzhener-podpolkovnik v
otstavke

Skillfully use technical means of propaganda. Komm. Vooruzh. Sil
46 no.16:61-64 Ag '65. (MIRA 18:8)

TYUTYNNIK, M.S., redaktor; LYUDOVSKAYA, N.I., tekhnicheskiy redaktor.

[Progressive methods of mining engineering; new developments
of cement industry quarries] Novoe na kar'erkakh tsementnoi
promyshlennosti. Moskva, Gos.izd-vo lit-ry po stroit. materia-
lam, 1955. 77 p.
(Mining engineering)

TYUTYUNNIK, M.Ye., nauchnyy sotrudnik

Airplanes and ground apparatus in beet fields. Zashch.rast.ot
vred.i bol. 5 no.7:6-8 Jl '60. (MIRA 16:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut Grazh-
danskogo vozduzhnogo flota.

(Ukraine—Sugar beets—Diseases and pests)
(Ukraine—Spraying and dusting in agriculture)

TYUTYUNIK, N. P.

TYUTYUNIK, N. P.: "The Formation of Economically Valuable Signs in the Vegetative Hybridization of Tomatoes." Author's abstract of a dissertation submitted at Omsk Agricultural Inst imeni S. M. Kirov. Omsk, 1956. (Dissertation for the Degree of Candidate in Agricultural Science)

So: Knizhnaya Letopis', No. 19, 1956.

DELIMARSKIY, Yu.K., akademik; CHETVERIKOV, A.V., kand.khimicheskikh nauk;
PAVLENKO, N.A., inzh.; TIUTYUNNIK, O.A.

Effect of iron chloride on the electrolytic tin plating of black
plate from fused salts. Sbor. trud. TSNIICHM no.28:153-158 '62.

(MIRA 15:11)

1. AN UkrSSR.

(Tin plating) (Iron chloride)

CHETVERIKOV, A.V., kand.tekhn.nauk; PAVLENKO, N.A., inzh.; TYUTYUNIK, O.A.,
inzh.

Using a protective atmosphere in electrolytic tinning from fused
electrolytes. Sbor. trud. TSNIICHM no.34:45-50 '63. (MIRA 17:4)

L 1589-66 ENT(m)/T

ACCESSION NR: AP5020950

UR/0073/65/031/008/0761/0767

AUTHOR: Piontkovskaya, M. A.; Neymark, I. Ye.; Tyutyunnik, R. S.;
Lukash, A. Ye.; Lantsova, M. A.

46
45
B

TITLE: Properties of magnesium-substituted zeolite

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 31, no. 8, 1965, 761-767

TOPIC TAGS: zeolite, magnesium, adsorption, nuclear magnetic resonance

ABSTRACT: The zeolite was prepared from the molecular sieve NaA or NH₄NaA and magnesium sulfate by cation exchange under static or flow conditions at 20-60 C. The exchange amounted to about 40% for NaA and 58% for NH₄NaA. For the study of properties, the following was determined: isotherms of vapor absorption (for water, benzene and lower alcohols) in the powders under vacuum at 20C, chromatographic data for the heat of adsorption (20-300C) and content in the individual gases (H₂ + CO + CH₄), and nuclear magnetic resonance for elucidating the nature and character of the forces linking adsorbed water molecules in the zeolite. The compositions of the elemental cells of these zeolites, Mg^INaA, Mg^{II}NH₄NaA and Mg^{III}NH₄NaA are reported. Adsorption isotherms for the Mg zeolite were

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ACCESSION NR: AP5020950

located above those for the Na form. Calculation of water vapor molecules per one zeolite cell gave 730 A^3 for pores in NaA and 958 A^3 for $\text{Mg}^{III}\text{NH}_4\text{NaA}$, that is, 30% more for the latter. Tests with alcohols, etc. showed that no molecules with diameters above 5 Å were adsorbed. The NMR lines for MgNaA, CaNaA and KNaA are reported. They show that the cations have an essential influence on the magnetic resonance of proton absorption, that is, that upon filling of zeolite pores with water, the latter locates mainly at the metal cations of the individual cells. This supports the assumption of cation participation in the primary adsorption act of polarized water molecules. Adsorption heat was shown to depend upon the individual gas rather than the metal. The heat of adsorption increased by about 2 kcal/mole for each CH_2 group. The nature of the cation which compensates the charge of the alumino silicate body influenced the adsorption heat of CO molecules and hydrocarbons with unsaturated bonds. Orig. art. has: 5 figures and 3 tables.

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarzhevskogo AN UkrSSR
(Institute of Physics Chemistry, AN UkrSSR)

SUBMITTED: 10 Mar 84

ENCL: 00

SUB CODE: IC

NR REF SOV: 008

OTHER: 001

Card 2/2 AP

AKOL'ZIN, L.Ye.; BOROZDOV, I.A.; BEDILO, V.Ye.; TERESHKIN, F.N. Prinimali
uchastiye: BELYAYEV, F.R.; BEREZHENOV, N.V.; BUBYR', V.A.; VARSHAVSKIY,
I.H.; DUDKO, V.P.; YERSHOV, V.S.; DUGIH, Ye.V.; DUKALOV, M.F.;
IVANOV, P.S.; KONAREVA, V.F.; MONIN, M.I.; MOGILKO, A.P.; PANCHENKO,
A.I.; POKALYUKOV, S.N.; PRIKHOD'KO, N.D.; RUBIN, I.A.; SIDORENKO,
P.A.; TYUTYUNIK, Ya.I.; KHMYR'NITSKIY, L.Ya.; BONDAR', V.I.; KRIVTSOV,
A.T.; LOKSHIN, V.D.; SOFIYENKO, N.P. RABINKOVA, L.K., red.izd-va;
BOLDYREVA, Z.A., tekhn.red.

[Types of mine cross section] Tipovye secheniya gornykh vyrabotok.
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu. Vol.4.
[Cross section of mines supported by a sectional reinforced-concrete
lining of URP-II panels for 1-, 2- and 3-ton railroad cars] Secheniya
vyrabotok, zakreplennykh sbornoi zhelezobetonnoi krep'iu iz plit
URP-II, dlia 1-, 2- i 3-tonnykh vagonetok. 1960. 278 p.

(MIRA 13:12)

1. Khar'kov. Gosudarstvennyy proyektnyy institut Yuzhgiproshakht.
(Mine timbering)

TYUTYUNNIK, A.G.

Achievements in the technology of pasteboard production, Med.prom.
11 no.7:51-53 J1 '57.
(PASTEBOARD) (MLRA 10:8)

MAYSTRENKO, A.K.; TYUTYUNNIK, I.F.

Functional state of muscles in patients with neglected congenital dislocations of the hip according to electro-myographic data. Trudy Ukr. nauch.-issl. inst. ortop. i travm. no.15:101-108 '59
(MIRA 16:12)

1. Iz otdela fiziologii i patomekhaniki (zav. otdelom doktor med. nauk O.V.Nedrigaylova)Ukrainskogo nauchno-issledovatel'skogo instituta ortopedii i travmatologii imeni prof. M.I.Sitenko (dir. - chlen-korrespondent AMN SSSR, prof. N.P. Novachenko).

TYUTYUNNIK, L.N.; KHANIN, I.M.

Experimental investigation of transient processes in the thermal
operating conditions of coke ovens. Trudy DKHTI no.16:135-146
'63. (MIRA 17:2)

ACC NR: AP6034474

(A,N)

SOURCE CODE: UR/0433/66/000/010/0010/0013

AUTHOR: Tyutyunnik, M. (Senior research associate)

ORG: All-Union Institute for Agricultural and Special-Purpose Civil Aviation (Vsesoyuznyy institut sel'skokhozyaystvennogo i spetsial'nogo primeneniya grazhdanskoy aviatsii)

TITLE: Aviation protects the harvest

SOURCE: Zashchita rasteniy, no. 10, 1966, 10-13

TOPIC TAGS: agriculture, crop protection, ^{insect control, helicopter,} aerial spraying, aerial dusting, plant disease control, utility aircraft/AN-2 aircraft, Yak-12 aircraft, AN-2M aircraft, Mi-1 helicopter, Mi-2 helicopter, Ka-15 helicopter

ABSTRACT: Aviation plays an increasingly important role in Soviet agriculture. Among the types of aircraft used in agriculture are the AN-2 and Yak-12 airplanes and the Mi-1 and Ka-15 helicopters. In addition, an improved version of the AN-2M aircraft and the Mi-2 helicopter are currently undergoing tests. In 1965 the AN-2 airplane was used in 88.2% of all agricultural operations, the Yak-12 in 9.8%, and helicopters in 2%. Moreover, in 1965 the AN-2 was used in 87% of all aerial plant protection operations, 91.2% of weed-control operations, and 95.7% of

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UDC: 632.9:631.171:629.138

ACC NR: AP6034474

defoliation and desiccation operations. Helicopters are primarily utilized for pest control and disease control in orchards and vineyards. Spraying is by far the most popular method of aerial dispersal of chemicals. In 1965, chemical application by spraying was used on 57.4% of all acreage treated, dusting on 25.3%, and toxic seed and other lure on 17.3% of the area. A table shows the area distribution of fields treated from aircraft (listed by republics) and the types of treatment applied. Orig. art. has 3 figures and 4 tables. [WA-50])

SUB CODE: 02,01,06/ SUBM DATE: none

Card 2/2

TYUTYUNIK. S.G., inzh.

Reconditioning truck and tractor parts at the Bori^{spol'}
Tractor Repair Station by means of welding. Svar.proizv.
no.7:32-33 J1 '60. (MIRA 13:7)
(Bori^{spol'}--Agricultural machinery--Maintenance and repair)
(Electric welding)

AKOL'ZIN, L.Ye.; LISHBERGOV, V.D.; SHCHUKINA, G.F.; TSOY, D.; DUGIN,
Ye.V., otv.red.; DUKALOV, M.F., red.; BUBIR', V.A., red.; TYUTYUNIK,
Ya.I., red.; MONIN, M.I., red.; PANCHENKO, A.I., red.; VARSHAVSKIY,
I.N., red.; BELYAYEV, F.R., red.; RABINKOVA, L.K., red.izd-va;
KOROVENKOVA, Z.A., tekhn.red.

[Standard cross sections of mine workings] Tipovye secheniya gornykh
vyrabotok. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu.
Vol.1. [Cross section of timber-supported workings for 1, 2, and
3-ton cars] Secheniya vyrabotok, zakreplennykh derevom dlia 1, 2
i 3-tonnykh vagonstok. 1960. 345 p. (MIRA 13:11)

1. Moscow. Gosudarstvennyy proyektnyy institut Yuzhgiproshakht.
(Mining engineering)

BEDILLO, V.Ye.; BOROZDOV, I.A.; YERSHOV, V.S.; MOGILKO, A.P.; NIKOLAYEV,
G.P.; DUGIM, Ye.V., otv.red.; DUKALOV, M.F., red.; BUBYR', V.A.,
red.; VARSHAVSKIY, I.H., red.; TYUTIUNIK, Ya.I., red.; MOHIN, M.I.,
red.; PANCHENKO, A.I., red.; BELYAYEV, F.R., red.; RABINKOVA, L.K.,
red.izd-va; BOLDYREVA, Z.A., tekhn.red.

[Standard cross sections of mine workings] Tipovye secheniya gor-
nykh vyrabotok. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gorno-
mu delu. Vol.2. [Cross section of workings lined with concrete
and artificial stone, for 1-ton cars] Secheniya vyrabotok, zakrep-
lennykh betonom i iskusstvennym kamнем, dla 1-tonnykh vagonetok.
(MIRA 13:11)
1960. 459 p.

1. Moscow. Gosudarstvennyy proyektnyy institut Yuzhgiproshakht.
(Mining engineering)

TYUTYUNNIK, I.F. (Khar'kov)

Sensory adaptation disorders in distal fractures of the extremities.
Vrach. delo no.9:139-140 S '61. (MIRA 14:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut ortopedii i
travmatologii imeni prof. M.I.Sitenko.
(SENSES AND SENSATION)
(EXTREMITIES (ANATOMY)--FRACTURES)

AKOL'ZIN, L.Ye.; BEDILO, V.Ye.; BOROZDOV, I.A.; LISHBERGOV, V.D.; TSOY, D.;
DUGIN, Ye.V., otv.red.; DUKALOV, M.F., red.; BUBYR', V.A., red.;
TYUTYUNIK, Ya.I., red.; MONIN, M.I., red.; PANCHENKO, A.I., red.;
BELYAYEV, F.R., red.; RABINKOVA, L.K., red.izd-va; KOROVENKOVA,
Z.A., *tekhn.red.

[Standard cross sections of mine workings] Tipovye secheniya
gornykh vyrabotok. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po
gornomu delu. Vol.3. [Cross section of workings lined with
concrete and artificial stone for 2 and 3-ton cars] Secheniya vy-
rabotok, zakreplennykh betonom i iskusstvennym kamнем, dlia 2- i
3-tonnykh vagonetok. 1960. 447 p. (MIRA 13:11)

1. Moscow. Gosudarstvennyy proyektnyy institut Yuzhgiproshakht.
(Mining engineering)

ACC NR: AP6034474

(A,N)

SOURCE CODE: UR/0433/66/000/010/0010/0013

AUTHOR: Tyutyunnik, M. (Senior research associate)

ORG: All-Union Institute for Agricultural and Special-Purpose Civil Aviation (Vsesoyuznyy institut sel'skokhozyaystvennogo i spetsial'nogo primeneniya grazhdanskoy aviatsii)

TITLE: Aviation protects the harvest

SOURCE: Zashchita rasteniy, no. 10, 1966, 10-13

TOPIC TAGS: agriculture, crop protection, aerial spraying, aerial dusting, plant disease control, utility aircraft/AN-2 aircraft, Yak-12 aircraft, AN-2M aircraft, Mi-1 helicopter, Mi-2 helicopter, Ka-15 helicopter

ABSTRACT: Aviation plays an increasingly important role in Soviet agriculture. Among the types of aircraft used in agriculture are the AN-2 and Yak-12 airplanes and the Mi-1 and Ka-15 helicopters. In addition, an improved version of the AN-2M aircraft and the Mi-2 helicopter are currently undergoing tests. In 1965 the AN-2 airplane was used in 88.2% of all agricultural operations, the Yak-12 in 9.8%, and helicopters in 2%. Moreover, in 1965 the AN-2 was used in 87% of all aerial plant protection operations, 91.2% of weed-control operations, and 95.7% of

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UDC: 632.9:631.171:629.138

ACC NR: AP6034474

defoliation and desiccation operations. Helicopters are primarily utilized for pest control and disease control in orchards and vineyards. Spraying is by far the most popular method of aerial dispersal of chemicals. In 1965, chemical application by spraying was used on 57.4% of all acreage treated, dusting on 25.3%, and toxic seed and other lure on 17.3% of the area. A table shows the area distribution of fields treated from aircraft (listed by republics) and the types of treatment applied. Orig. art. has: 3 figures and 4 tables. [WA-50].

SUB CODE: 02,01,06/ SUBM DATE: none

Card 2/2

TYUTYUNNIK, M.Ye., nauchnyy sotrudnik

Economic aspects of airplane dusting in the control of weeds on
grain fields. Zashch. rast. ot vred. i bol. 3 no.4:10-11
J1-Ag '58. (MIRA 11:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut grazhdanskogo
vozdushnogo flota.
(Herbicides) (Aeronautics in agriculture)

TYUTYUNNIK, P.M., aspirant

Prolonged resistance to blasting of frozen rocks. Nauch.
trudy Mosk. inst. radioelek. i gor. elektromekh. no.47:
(MIRA 17:6)
164-180 '63.

TYUTYUNNIK, P.M., inzh.

Studying the durability of frozen rocks. Shakht. stroi. 6 no.3:
11-14 Mr '62. (MIRA 15:3)

1. Moskovskiy gornyy institut.
(Frozen ground--Testing) (Mining geology)

TYUTYUNNIK, P.M., kand.tekhn.nauk

Stability of shaft walls sunk by the method of rock freezing.
Shakht.stroi. 8 no.1:16-19 Ja '64. (MIRA 17:4)

1. Moskovskiy institut radioelektroniki i gornoj elektromekhaniki.

TYUTYUNNIK, P.M., inzh.

Study of the long-time strength of frozen rocks. Shakht.stroi.
6 no.4:14-17 Ap '62. (MIRA 15:4)

1. Moskovskiy gornyy institut.
(Frozen ground--Testing)

MATYASH, I.V.; PIONTKOVSKAYA, M.A.; TARASENKO, L.M.; TYUTYUNNIK, R.S.

Proton relaxation in zeolitic water. Zhur.strukt.khim. 4
no.1;106-107 Ja-F '63. (MIRA 16:2)

1. Fiziko-tehnicheskiy institut nizkikh temperatur AN UkrSSR
i Institut fizicheskoy khimii AN UkrSSR.
(Zeolites—Spectra) (Nuclear magnetic resonance and relaxation)
(Water)

NEYMARK, I.Ye.; PIONTKOVSKAYA, M.A.; LUKASH, A.Ye.; TYUTYUNNIK, R.S.

Synthesis of artificial zeolites and study of their adsorption properties [with summary in English]. Koll. zhur, 23 no.4:
454-461 Jl-Ag '61. (MIRA 14:8)

1. Institut fizicheskoy khimii AN USSR im. L.V. Pisarzhevskogo.
(Zeolites) (Adsorption)

S/192/63/004/001/002/003
D204/D307

AUTHORS: Matyash, I.V., Piontkovskaya, M.A., Tarasenko, L.M.
and Tyutyunnik, R.S.

TITLE: Proton relaxation in zeolitic water

PERIODICAL: Zhurnal strukturnoy khimii, v. 4, no. 1, 1963,
106-107

TEXT: It is noted that although the structure of many zeolites has been studied in some detail both experimentally and theoretically, there is little information about molecular bonding forces in zeolitic water. This has been largely due to experimental difficulties encountered with chemical and spectroscopic (X-ray and infrared) methods. The present work was undertaken to obtain further information about zeolites and to determine the NMR line widths for artificial zeolites. The following were investigated: KA, NaA, CaA, LiA and MgA. It was found that the derivatives of the absorption lines of KA, CaA and MgA did not exhibit detectable splitting which was ascribed to the fact that the specimens had not lower than fourfold symmetry axes and the sorption cavities were nearly spherical. Measured Card 1/2

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D204/D307

Proton relaxation ...

sured NMR line widths as functions of the relative amount of water appear to confirm that the spin-spin relaxation time does depend on the relative amount of water as reported by Matyash et al (this journal, 2, 214, 1962). On the other hand the self-diffusion coefficient of water molecules in zeolites is universally proportional to the line width ΔH . The correlation between ΔH and τ_i/τ is shown below

Cation	K	Na	Ca	Li	Mg
$\Delta H \text{ oe}$	0.08	0.09	0.17	0.17	0.48
τ_i/τ	0.05	1.46	2.16	3.48	8.63

where τ_i is the mean life of water molecules near the corresponding cation and τ is the corresponding equilibrium value in pure water. There are 2 figures and 1 table.

ASSOCIATION: Fiziko-tehnicheskiy institut nizkikh temperatur AN USSR (Physico-Technical Low Temperature Institute of the AS UkrSSR) Institut fizicheskoy khimii AN USSR (Institute of Physical Chemistry of the AS UkrSSR)

SUBMITTED: May 28, 1962

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TYUTYUHNIK, R.S.

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PHASE I BOOK EXPLOITATION

SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniiye, issledovaniye i primeneniye
(Synthetic Zeolites: Production, Investigation, and Use). Mos-
cow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady)
Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh
nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor
of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P.
Golub'.

PURPOSE: This book is intended for scientists and engineers engaged
in the production of synthetic zeolites (molecular sieves), and
for chemists in general.

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Synthetic Zeolites: (Cont.)

SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensoveta, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

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the General Laws of Ion Exchange to Exchange on Synthetic
Zeolite CaA 41
- Neymark, I. Ye., A. I. Rastrenenko, V. P. Fedorovskaya, and
A. S. Plachinda. Variation of Adsorption Properties of
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- Neymark, I. Ye., M. A. Piontkovskaya, A. Ye. Lukash, and
R. S. Tyutiyunnik. Variation of the Selective Capacity
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